

**COMM-CO**  
Communication today and tomorrow



Intrinsically safe for potentially explosive environments.

**IECEX**



**IP66  
IP67**

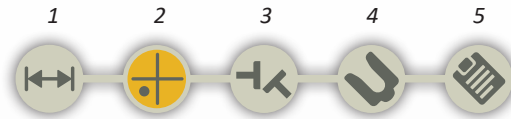
**Shaft Alignment**  
**XT550**

# THIS IS EASY ALIGNMENT

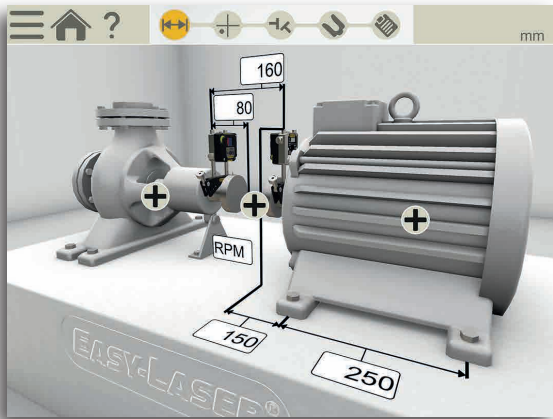
## HORIZONTAL PROGRAM



The user interface is intuitive and guides you through the measurement process. It is animated and zooms in to the relevant element for each step. You can save the measurements of a machine for *As found* and *As left* in the same file. The procedure for the other alignment programs in the XT app is equally intuitive and guided.



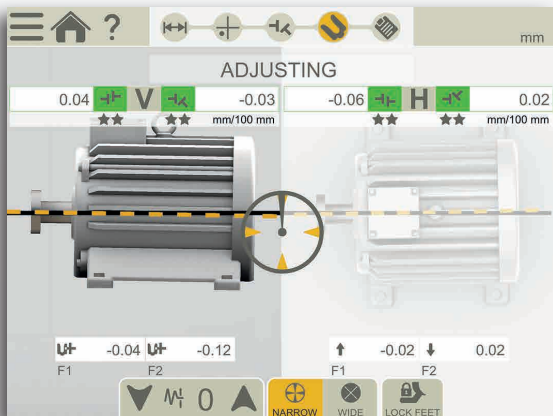
The interactive workflow indicator lets you easily jump to any part in the measurement process.



1. Enter dimensions

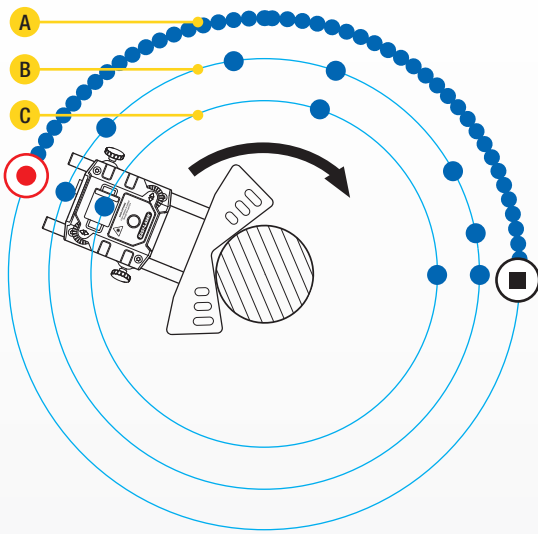


2. Measure (Four methods available, explained to the right)



# SMART FUNCTIONS

## MEASUREMENT METHODS



● Measuring points

● Start recording

■ Stop recording



### CONTINUOUS SWEEP (A)

Automatic recording of measurement values during continuous sweeping of the shaft. Hundreds of points are registered. You can start anywhere on the turn. Quality check of measurement is provided (see example down left).



### MULTIPOINT (B)

Multipoint is basically the same as EasyTurn™, but instead you can record multiple points on the sector rotated. This will provide an optimized calculation basis. Perfect for e.g. turbine and sliding bearing applications.



### EASYTURN (C)

The EasyTurn™ function allows you to begin the measurement process from anywhere on the turn. You can turn the shaft to any three positions with as little as 20° between each position to register the measurement values. An easier-to-use version of the three-point method (see 9–12–3).



### 9–12–3

Measurement points are recorded at fixed points 9, 12 and 3 o'clock. This is the classic three-point method which can be used in most cases.



### THERMAL GROWTH

Automatically compensate for thermal expansion of the machines.



### SWAP VIEW

Understand adjustment directions more intuitively.



### CONTINUE SESSION

Your latest measurement is always available, automatically saved.



### MEASUREMENT VALUE FILTER

Improve readings when measuring conditions are poor.



### MULTIPLE SETS OF FEET

Align machines with more than two pairs of feet.



### LOCKED FEET

Lock any pair of feet on the machine. Used when aligning base-bound or bolt-bound machines.



### WIDE LIVE ADJUSTMENT

Adjust with live values using expanded sensor position ranges in the H and V position.



### SELECT MACHINE IMAGE

Choose from different 3D machines to portray your machinery on either side of coupling.



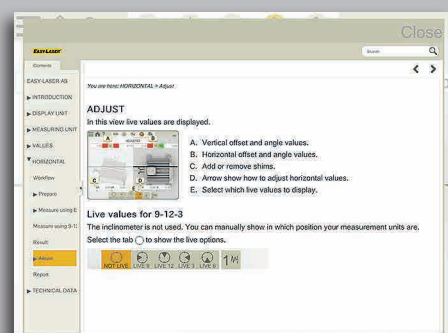
### SELECT COUPLING TYPE

Choose measurement method depending on coupling type: short flex, spacer shaft.



### BUILT-IN HELP

The app includes a searchable *Users Manual* which opens the relevant chapter depending where in the process you are. This makes it quick and easy to find the answer to your questions.



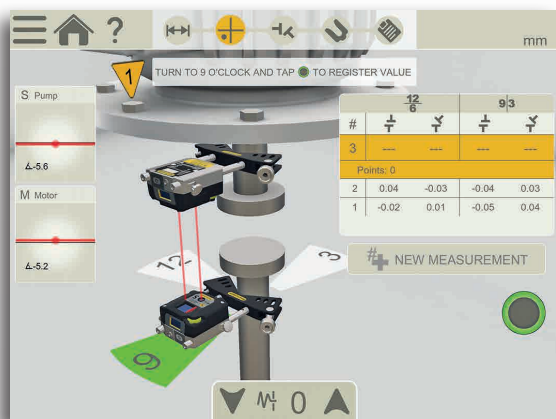
Easy-to-access built-in manual

# MORE POSSIBILITIES

## VERTICAL/FLANGE MOUNTED MACHINES



For measurement and alignment of vertically and flange mounted machines. Handles machines with 4, 6, 8 and 10 bolts.

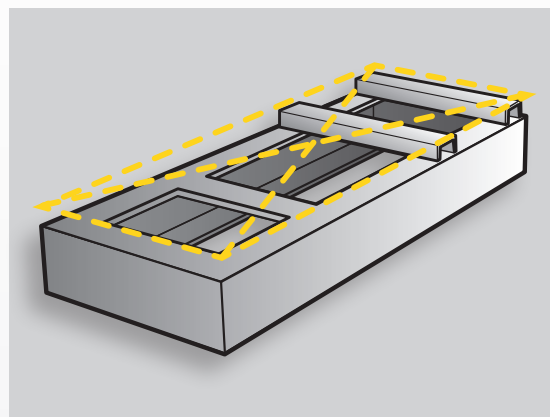


Program for vertically or flange mounted machines

## TWIST MEASUREMENT OF MACHINE BASE



The twist measurement program allows you to check the flatness or twist of the machine foundation using only the measuring units in the system. (Available 2018)

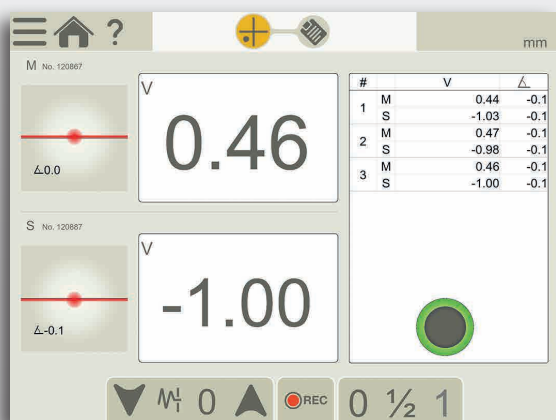


Twist program for checking machine base

## VALUES – DIGITAL DIAL INDICATOR



With the Values program you measure as with dial gauges, but with laser precision and the possibility to document the measurement result. Automatic recording possible (set the interval and duration). You can make individual notes for each measurement point.

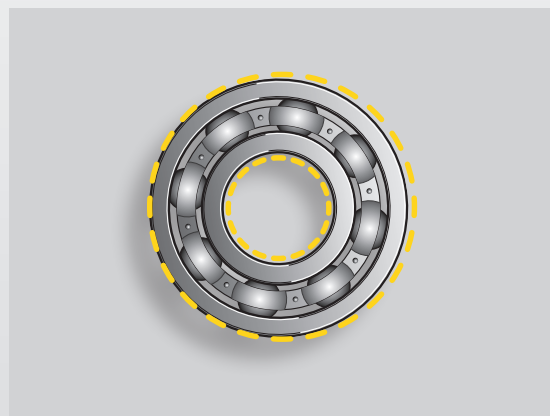


Values from measuring units

## CHECK BEARING CLEARANCE etc.



With the Values program you can check bearing clearance or shaft load. It can also be used to "manually" calculate straightness, flatness and dynamic movements of machine components.



# DOCUMENTATION

## SAVE!



### INTERNAL MEMORY

Save your measurement files, photos and reports to the internal memory.



### VERSATILE FILE TYPES

Both a PDF and an Excel file are generated.



| TYPE             | NAME                         | DATE       | Edit   |
|------------------|------------------------------|------------|--------|
| [-]              | Shaft_2018-02-14 14_21_05    | 2018-02-14 | [Edit] |
| V 0.00<br>H 0.00 | Values_2018-04-10            | 2018-04-10 | [Edit] |
| IMG              | IMG_20180410_142801          | 2018-04-10 |        |
| [-]              | Shaft Alignment Water pump 3 | 2018-04-10 | [Edit] |
| [-]              | Vertical motor ABB           | 2018-04-14 | [Edit] |

## SHOW!



### CUSTOM PDF REPORT TEMPLATES

Use one of the two formats included, or design your own.



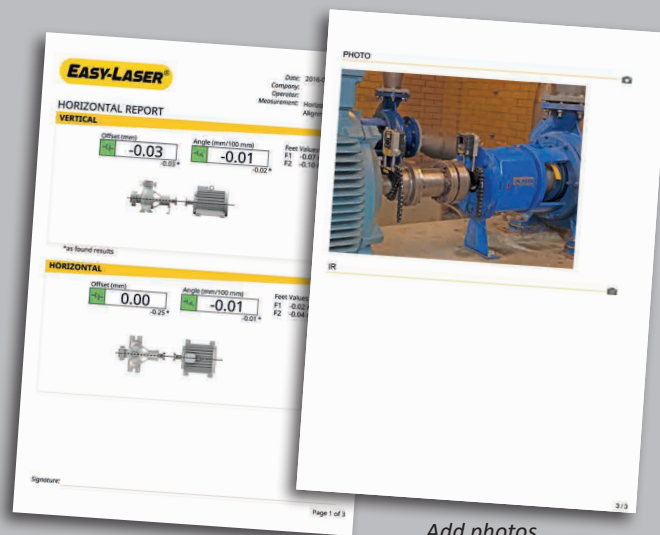
### ADD NOTES

Explain it a little more.



### ADD PHOTO

Show what you mean.



Add photos

## SHARE!



### SEND THE REPORTS

Share the reports via email.  
Possible on all platforms.



# XT550

# SYSTEM PARTS

## XT50-M/S MEASURING UNITS

The XT50 measuring units utilize dot-type laser and 1-axis square PSD surfaces. A state-of-the-art OLED display (D) shows the angle of the unit, making it easier to position it on the shaft.

The diagonally positioned locking knobs securely lock the unit on the rods. Rigid aluminium housing provide maximum stability. IP66 and 67, dust- water- and shockproof. Heavy-duty battery for very long operating times; up to 20 hours. Built-in wireless technology.

## SHAFT BRACKET

The V-bracket is both light yet rigid, with two rods for maximum stability in all directions. Pre-mounted chain for quick setup on the machine.



- A. PSD aperture
- B. Laser aperture
- C. Laser angle adjustment
- D. OLED display: battery status/unit angle
- E. Chain tightening knob
- F. Charger connector
- G. Extendable stainless steel rods
- H. Locking knob
- I. Slidable target/dust cover



## DOT-TYPE LASER TECHNOLOGY

The dot laser technology makes it possible to measure larger machines and longer spans than line laser systems. It also provides higher accuracy when backlash in the coupling is present. In addition, dot laser allows you to check more things when installing a machine, e.g. twist of foundation and bearing clearance.



## DUAL LASERS, PSD, INCLINOMETERS

With electronic inclinometers in both measuring units the system knows exactly how they are positioned. This also makes it very easy to align uncoupled shafts. The so called reversed measurement method with two laser beams and two PSD makes it possible to also measure very incorrectly set machines. This is particularly good for new installations, where the machines are not yet in the correct position. Compared to many other methods, the Dual Technology will retain the measurement accuracy also when distances increase.

## ECOM Tab-Ex® DISPLAY UNIT

Based on Samsung GALAXY Tab Active, ecom's hazardous area tablet is certified for use in Zone 1/ 21 & DIV 1 hazardous areas.

System XT550 comes in two configurations; with or without the ecom display. The app runs on most iOS and Android units, as well as our own display unit XT11. However, those are not allowed in potentially explosive areas, but makes for a perfect complement for use in other places.



- A. Rubber coated housing
- B. Large and clear 8" TFT display, glove-enabled

# RUGGED DESIGN

## IP66 AND IP67 APPROVED

Easy-Laser® XT50 is waterproof, dustproof and shockproof. The units have been tested and approved to an Ingress Protection rating of IP66 and IP67, which means that they are dustproof and waterproof to a depth of 1 metre, and also protected against powerful water jets.



## ATEX APPROVED

The Easy-Laser® XT50 measuring units and the ecom Tab-Ex® tablet are approved in accordance with the latest ATEX directives.



# SYSTEMS



## PART NO. 12-1097

Display unit, Ex/ATEX case

Weight: 8.4 kg [18.5 lbs]  
Dimension WxHxD: 450x300x180 mm [17.7"x11.8"x7.1"]

## PART NO. 12-1031

Same as above, but without display unit.

Weight: 6.9 kg [15.2 lbs]

# TECHNICAL DATA

## Measuring units XT50-M / XT50-S

|                          |                                                    |
|--------------------------|----------------------------------------------------|
| Type of detector         | 1 axis TruePSD 20x20 mm [0.79x0.79"]               |
| Communication            | BT wireless technology                             |
| Battery type             | Heavy duty Li Ion chargeable                       |
| Operating time           | Up to 20 h continuously                            |
| Resolution               | 0.001 mm [0.05 mils]                               |
| Measuring errors         | <1%                                                |
| Measurement range        | Up to 20 m [66 feet]                               |
| Type of laser            | Diode laser                                        |
| Laser wavelength         | 635–670 nm                                         |
| Laser class              | Safety class 2                                     |
| Laser output             | <1 mW                                              |
| Electronic inclinometer  | 0.1° resolution                                    |
| Environmental protection | IP class 66 and 67                                 |
| Operating temperature    | -10–50 °C                                          |
| Storage temperature      | -20–50 °C                                          |
| Relative humidity        | 10–95%                                             |
| OLED display             | 128x64 pixels                                      |
| Housing material         | Anodized aluminium + PC/ABS + TPE                  |
| Dimensions               | WxHxD: 76x76.5x50.9 mm [3.0x3.0x2.0"]              |
| Weight                   | 316 g [11.1 oz]                                    |
| Ex classification        | Ⓔ II 2 G Ex ib op is IIC T4 Gb, -10°C ≤ Ta ≤ +50°C |
| Ex certificate number    | Presafe 17 ATEX 10552X, IECEx PRE 17.0049X         |

## Software (XT Alignment App)

Languages en / de / sv / es / pt / ru / ja / ko / zh / it / fr

## Display unit ecom Tab-Ex® (For full technical specification, see [www.ecom-ex.com](http://www.ecom-ex.com))

|                       |                                                        |
|-----------------------|--------------------------------------------------------|
| Type of display/size  | TFT 8" colour screen                                   |
| Operating system      | Android™ 5.1.1                                         |
| Operating time        | Up to 11 h continuously                                |
| Communication         | Bluetooth® LE4.0 Wireless technology, WiFi             |
| Camera                | 3 Mp with flash (rear), 1.3 Mp (front)                 |
| Operating temperature | -20–50 °C                                              |
| Dimensions            | WxHxD: 162x256x33 mm [6.4x10.1x1.3"]                   |
| Weight                | 1250 g [2.75 lbs]                                      |
| Ex classification     | Ⓔ II 2 GD Ex db ia op is IIC T5 Gb, -20°C ≤ Ta ≤ +50°C |
| Ex certificate number | Sira 15 ATEX 1205X, IECEx SIR 15.0075X                 |

## Cable

Charging cable (splitter cable) Length 1 m [39.4"]

## Brackets etc.

|                  |                                                                              |
|------------------|------------------------------------------------------------------------------|
| Type             | V-bracket for chain, width 18 mm [0.7"].                                     |
| Shaft diameters  | 20–150 mm [0.8–6.0"]<br>With extension chain, diameters up to 450 mm [17.7"] |
| Bracket material | Anodised aluminium                                                           |
| Chain material   | Stainless steel                                                              |
| Rod length       | 120 mm, 60 mm [4.72", 2.36"] (extendable)                                    |
| Rod material     | Stainless steel                                                              |

## Easy-Laser® XT550 Shaft system (12-1031) includes:

- 1 Measuring unit XT50-M
- 1 Measuring unit XT50-S
- 2 Shaft brackets with chains and rods
- 4 Rods 60 mm [2.36"]
- 2 Rods 120 mm [4.72"]
- 2 Extension chains 900 mm [35.4"]
- 1 Measuring tape 3 m [9.8"]
- 1 Rod tool
- 1 Charger (100–240 V AC)
- 1 DC split cable for charging
- 1 Quick reference manual
- 1 Cleaning cloth for optics
- 1 USB memory with manuals
- 1 Carrying case Ex/ATEX

## System 12-1097 also includes:

- 1 Display unit ecom Tab-Ex®

# EASY-LASER® GENERATION XT

*The age of measurement independence is here!*



**Android**



XT11



**iOS**



## FLEXIBILITY

The Generation XT app runs on iOS or Android devices\*, be it a tablet or a phone. For use in potentially explosive environments the unit has to be designed, approved and certified for that area\*\*. But for non-hazardous areas you have full freedom!

\*Conditions apply

\*\*Please note that the XT11 and standard iOS/Android devices normally are not ATEX approved.



## SAME INTERFACE

Purchase multiple systems with various capabilities, train once! The training costs are minimized significantly since the app interface and basic functionality is identical for all systems.